## SEQUENCE LISTING

	•	1102	> HOC	ige,	Mart	in F	ζ.									
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ggc Gly	tgg Trp 5	gcc Ala	gcc Ala	ccc Pro	ctg Leu	ctc Leu 10	ctg Leu	ctg Leu	ctg Leu	ctc Leu	cag Gln 15	gga Gly	ggc Gly	tgg Trp	ggc Gly	405
tgc C <b>ys</b> 20	ccc Pro	gac Asp	ctc Leu	gtc Val	tgc Cys 25	tac Tyr	acc Thr	gat Asp	tac Tyr	ctc Leu 30	cag Gln	acg Thr	gtc Val	atc Ile	tgc Cys 35	453
atc Ile	ctg Leu	gaa Glu	atg Met	tgg Trp 40	Asn	ctc Leu	cac His	ccc Pro	agc Ser 45	acg Thr	ctc Leu	acc Thr	ctt Leu	acc Thr 50	tgg Trp	501
caa Gln	gac Asp	cag Gln	tat Tyr 55	gaa Glu	gag Glu	ctg Leu	aag Lys	gac Asp 60	gag Glu	gcc Ala	acc Thr	tcc Ser	tgc Cys 65	agc Ser	ctc Leu	549
cac	agg Arg	tcg Ser 70	gcc Ala	cac His	aat Asn	gcc Ala	acg Thr 75	cat His	gcc Ala	acc Thr	tac Tyr	acc Thr 80	tgc Cys	cac His	atg Met	597
gat	gta	ttc	cac	ttc	atg	gcc	gac	gac	att	ttc	agt	gtc	aac	atc	aca	645

Asp	Val 85	Phe	His	Phe	Met	Ala 90	Asp	Asp	Ile	Phe	Ser 95	Val	Asn	Ile	Thr	
					tac Tyr 105											693
					gct Ala											741
				Ile	tcc Ser											789
					aag Lys											837
gga Gly	gac Asp 165	ccc Pro	tgg Trp	gct Ala	gtg Val	agt Ser 170	ccg Pro	agg Arg	aga Arg	aag Lys	ctg Leu 175	atc Ile	tca Ser	gtg Val	gac Asp	885
tca Ser 180	aga Arg	agt Ser	gtc Val	tcc Ser	ctc Leu 185	ctc Leu	ccc Pro	ctg Leu	gag Glu	ttc Phe 190	cgc Arg	aaa Lys	gac Asp	tcg Ser	agc Ser 195	933
					cgg Arg											981
					tgg Trp											1029
					ggc Gly											1077
					att Ile											1125
ttg Leu 260	tgg Trp	agg Arg	cta Leu	tgg Trp	aag Lys 265	aag Lys	ata Ile	tgg Trp	gcc Ala	gtc Val 270	ccc Pro	agc Ser	cct Pro	gag Glu	cgg Arg 275	1173
ttc Phe	ttc Phe	atg Met	ccc Pro	ctg Leu 280	tac Tyr	aag Lys	ggc Gly	tgc Cys	agc Ser 285	gga Gly	gac Asp	ttc Phe	aag Lys	aaa Lys 290	tgg Trp	1221
gtg Val	ggt Gly	gca Ala	ccc Pro 295	ttc Phe	act Thr	ggc Gly	tcc Ser	agc Ser 300	ctg Leu	gag Glu	ctg Leu	gga Gly	ccc Pro 305	tgg Trp	agc Ser	1269
cca Pro	gag Glu	gtg Val	ccc Pro	tcc Ser	acc Thr	ctg Leu	gag Glu	gtg Val	tac Tyr	agc Ser	tgc Cys	cac His	cca Pro	cca Pro	cgg Arg	1317

agc ccg gcc aag agg ctg cag ctc acg gag cta caa gaa cca gca gag l365

Ser Pro Ala Lys Arg Leu Gln Leu Thr Glu Leu Gln Glu Pro Ala Glu
325

ctg gtg gag tct gac ggt gtg ccc aag ccc agc ttc tgg ccg aca gcc
Leu Val Glu Ser Asp Gly Val Pro Lys Pro Ser Phe Trp Pro Thr Ala
340

cag aac tcg ggg ggc tca gct tac agt gag gag agg gat cgg cca tac l461

cag aac tcg ggg ggc tca gct tac agt gag gag agg gat cgg cca tac l461 Gln Asn Ser Gly Gly Ser Ala Tyr Ser Glu Glu Arg Asp Arg Pro Tyr 360 365 370

ggc ctg gtg tcc att gac aca gtg act gtg cta gat gca gag ggg cca 1509

Gly Leu Val Ser Ile Asp Thr Val Thr Val Leu Asp Ala Glu Gly Pro
375 380 385

tgc acc tgg ccc tgc agc tgt gag gat gac ggc tac cca gcc ctg gac

Cys Thr Trp Pro Cys Ser Cys Glu Asp Asp Gly Tyr Pro Ala Leu Asp

390

395

400

ctg gat gct ggc ctg gag ccc agc cca ggc cta gag gac cca ctc ttg
Leu Asp Ala Gly Leu Glu Pro Ser Pro Gly Leu Glu Asp Pro Leu Leu
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410
415

gat gca ggg acc aca gtc ctg tcc tgt ggc tgt gtc tca gct ggc agc
Asp Ala Gly Thr Thr Val Leu Ser Cys Gly Cys Val Ser Ala Gly Ser
420 425 430 435

cct ggg cta gga ggg ccc ctg gga agc ctc ctg gac aga cta aag cca 1701 Pro Gly Leu Gly Gly Pro Leu Gly Ser Leu Leu Asp Arg Leu Lys Pro 440 445 450

ccc ctt gca gat ggg gag gac tgg gct ggg gga ctg ccc tgg ggt ggc 1749
Pro Leu Ala Asp Gly Glu Asp Trp Ala Gly Gly Leu Pro Trp Gly Gly
455 460 465

cgg tca cct gga ggg gtc tca gag agt gag gcg ggc tca ccc ctg gcc 1797 Arg Ser Pro Gly Gly Val Ser Glu Ser Glu Ala Gly Ser Pro Leu Ala 470 475 480

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Gly Leu Asp Met Asp Thr Phe Asp Ser Gly Phe Val Gly Ser Asp Cys
485
490
495

agc agc cct gtg gag tgt gac ttc acc agc ccc ggg gac gaa gga ccc
Ser Ser Pro Val Glu Cys Asp Phe Thr Ser Pro Gly Asp Glu Gly Pro
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ccc cgg agc tac ctc cgc cag tgg gtg gtc att cct ccg cca ctt tcg
Pro Arg Ser Tyr Leu Arg Gln Trp Val Val Ile Pro Pro Pro Leu Ser
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525
530

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<210> 2

<211> 538

<212> PRT

<213> Homo sapiens IL-2/IL-9 Receptor Like

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Val Ile Cys Ile Leu Glu Met Trp Asn Leu His Pro Ser Thr Leu Thr
        35
                            40
Leu Thr Trp Gln Asp Gln Tyr Glu Glu Leu Lys Asp Glu Ala Thr Ser
                        55
                                            60
Cys Ser Leu His Arg Ser Ala His Asn Ala Thr His Ala Thr Tyr Thr
                    70
                                        75
Cys His Met Asp Val Phe His Phe Met Ala Asp Asp Ile Phe Ser Val
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                85
Asn Ile Thr Asp Gln Ser Gly Asn Tyr Ser Gln Glu Cys Gly Ser Phe
            100
                                105
                                                    110
Leu Leu Ala Glu Ser Ile Lys Pro Ala Pro Pro Phe Asn Val Thr Val
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                                                125
Thr Phe Ser Gly Gln Tyr Asn Ile Ser Trp Arg Ser Asp Tyr Glu Asp
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Pro Ala Phe Tyr Met Leu Lys Gly Lys Leu Gln Tyr Glu Leu Gln Tyr
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                                        155
Arg Asn Arg Gly Asp Pro Trp Ala Val Ser Pro Arg Arg Lys Leu Ile
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Ser Val Asp Ser Arg Ser Val Ser Leu Leu Pro Leu Glu Phe Arg Lys
                                185
Asp Ser Ser Tyr Glu Leu Gln Val Arg Ala Gly Pro Met Pro Gly Ser
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                            200
                                                205
Ser Tyr Gln Gly Thr Trp Ser Glu Trp Ser Asp Pro Val Ile Phe Gln
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                                            220
Thr Gln Ser Glu Glu Leu Lys Glu Gly Trp Asn Pro His Leu Leu Leu
                                        235
                    230
Leu Leu Leu Val Ile Val Phe Ile Pro Ala Phe Trp Ser Leu Lys
                245
                                    250
Thr His Pro Leu Trp Arg Leu Trp Lys Lys Ile Trp Ala Val Pro Ser
                                                    270
            260
                                265
Pro Glu Arg Phe Phe Met Pro Leu Tyr Lys Gly Cys Ser Gly Asp Phe
                            280
Lys Lys Trp Val Gly Ala Pro Phe Thr Gly Ser Ser Leu Glu Leu Gly
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Pro Trp Ser Pro Glu Val Pro Ser Thr Leu Glu Val Tyr Ser Cys His
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Pro Pro Arg Ser Pro Ala Lys Arg Leu Gln Leu Thr Glu Leu Gln Glu
                                    330
Pro Ala Glu Leu Val Glu Ser Asp Gly Val Pro Lys Pro Ser Phe Trp
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Pro Thr Ala Gln Asn Ser Gly Gly Ser Ala Tyr Ser Glu Glu Arg Asp
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Arg Pro Tyr Gly Leu Val Ser Ile Asp Thr Val Thr Val Leu Asp Ala
                        375
                                             380
Glu Gly Pro Cys Thr Trp Pro Cys Ser Cys Glu Asp Asp Gly Tyr Pro
                    390
                                         395
Ala Leu Asp Leu Asp Ala Gly Leu Glu Pro Ser Pro Gly Leu Glu Asp
                405
                                     410
Pro Leu Leu Asp Ala Gly Thr Thr Val Leu Ser Cys Gly Cys Val Ser
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                                 425
                                                     430
Ala Gly Ser Pro Gly Leu Gly Gly Pro Leu Gly Ser Leu Leu Asp Arg
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                            440
                                                 445
Leu Lys Pro Pro Leu Ala Asp Gly Glu Asp Trp Ala Gly Gly Leu Pro
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                        455
                                             460
Trp Gly Gly Arg Ser Pro Gly Gly Val Ser Glu Ser Glu Ala Gly Ser
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                                         475
Pro Leu Ala Gly Leu Asp Met Asp Thr Phe Asp Ser Gly Phe Val Gly
                485
                                     490
Ser Asp Cys Ser Ser Pro Val Glu Cys Asp Phe Thr Ser Pro Gly Asp
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Glu Gly Pro Pro Arg Ser Tyr Leu Arg Gln Trp Val Val Ile Pro Pro
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                            520
Pro Leu Ser Ser Pro Gly Pro Gln Ala Ser
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etgtetgget geeceagece tactgtette etetgtgtag getetgeeca gatgeecgge
                                                                      180
tggtcctcag cctcaggact atctcagcag tgactcccct gattctggac ttgcacctga
                                                                      240
ctgaactcct gcccacctca aacettcacc tcccaccacc accactccga gtcccgctgt
                                                                      300
                                                                      360
gacteceaeg ceeaggagae cacceaagtg ceeeageeta aagaatgget ttetgaggaa
gateetgaag gagtaggtet gggacacage atg eee egg gge eea gtg get gee
                                                                      414
                                  Met Pro Arg Gly Pro Val Ala Ala
tta ctc ctg ctg att ctc cat gga gct tgg agc tgc ctg gac ctc act
                                                                      462
Leu Leu Leu Ile Leu His Gly Ala Trp Ser Cys Leu Asp Leu Thr
tgc tac act gac tac ctc tgg acc atc acc tgt gtc ctg gag aca cgg
                                                                      510
Cys Tyr Thr Asp Tyr Leu Trp Thr Ile Thr Cys Val Leu Glu Thr Arg
 25
                     30
age eec aac eec age ata etc agt etc ace tgg caa gat gaa tat gag
                                                                      558
Ser Pro Asn Pro Ser Ile Leu Ser Leu Thr Trp Gln Asp Glu Tyr Glu
                 4.5
                                      50
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														ggc Gly		606
							_	-		-	-	_		caa Gln		654
_		-	-	-			-			_	-	_		ggc Gly		702
				_		_		_	_	_		_		aag Lys		750
_			_				_	_				_		gat Asp 135		798
		_		-		-	-						_	aga Arg		846
_					_	_					_	-		tat Tyr	_	894
_		_			_	_				-		_		gtc Val		942
			-					-		_		-	_	cag Gln	_	990
														agt Ser 215		1038
				Val	Ile	Phe	Gln		Gln	Ala		Glu		gag Glu		1086
														att Ile	gtc. Val	1134
_	_		_		_	_			_					tgg Trp		1182
			_							_			_	ccc Pro	_	1230

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_	_		-	-			_		_	-		_		gag Glu		1422
														tca Ser		1470
	-			-	-					_				gac Asp 375		1518
														agc Ser		1566
														gag Glu		1614
					-	_		_	_		-		-	ttt Phe	_	1662
														tcc Ser		1710
	_		_	_		-		-			-	_	-	ggg Gly 455	-	1758
														ggc Gly		1806
	_	-	_						_	_	_	-		ttt Phe	_	1854
														gat Asp		1902
gga	ссс	cct	cga	agc	tat	ctc	cgc	cag	tgg	gtg	gtc	agg	acc	cct	cca	1950

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Gly Pro Pro Arg Ser Tyr Leu Arg Gln Trp Val Val Arg Thr Pro Pro
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                                       515
cct gtg gac agt gga gcc cag agc tagcatataa taaccagcta
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Pro Val Asp Ser Gly Ala Gln Ser Ser
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gtgtgtgtgt cttgggttgt gtgttagcac atccatgttg ggatttggtc tgttgctatg
                                                                  2117
tattggaatg ctaaattctc tacccaaagt tctaggccta cgagtgaatt ctcatgttta
                                                                  2177
                                                                  2237
caaacttgct gtgtaaacct tgttccttaa tttaatacca ttggttaaat aaaattggct
2297
                                                                  2357
gtgaggggag agggaccatg agcctgtggc caggagaaac agcaagtatc tggggtacac
                                                                  2417
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                               25
Ile Thr Cys Val Leu Glu Thr Arg Ser Pro Asn Pro Ser Ile Leu Ser
                                              45
       35
                           40
Leu Thr Trp Gln Asp Glu Tyr Glu Glu Leu Gln Asp Gln Glu Thr Phe
                      55
                                          60
Cys Ser Leu His Lys Ser Gly His Asn Thr Thr His Ile Trp Tyr Thr
                   70
                                       75
Cys His Met Arg Leu Ser Gln Phe Leu Ser Asp Glu Val Phe Ile Val
                                   90
               85
Asn Val Thr Asp Gln Ser Gly Asn Asn Ser Gln Glu Cys Gly Ser Phe
           100
                               105
                                                  110
Val Leu Ala Glu Ser Ile Lys Pro Ala Pro Pro Leu Asn Val Thr Val
                           120
                                              125
Ala Phe Ser Gly Arg Tyr Asp Ile Ser Trp Asp Ser Ala Tyr Asp Glu
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Pro Ser Asn Tyr Val Leu Arg Gly Lys Leu Gln Tyr Glu Leu Gln Tyr
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Arg Asn Leu Arg Asp Pro Tyr Ala Val Arg Pro Val Thr Lys Leu Ile
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Ser Val Asp Ser Arg Asn Val Ser Leu Leu Pro Glu Glu Phe His Lys
                               185
Asp Ser Ser Tyr Gln Leu Gln Met Arg Ala Ala Pro Gln Pro Gly Thr
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                                              205
Ser Phe Arg Gly Thr Trp Ser Glu Trp Ser Asp Pro Val Ile Phe Gln
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                                          220
Thr Gln Ala Gly Glu Pro Glu Ala Gly Trp Asp Pro His Met Leu Leu
                                       235
                   230
Leu Leu Ala Val Leu Ile Ile Val Leu Val Phe Met Gly Leu Lys Ile
               245
                                   250
His Leu Pro Trp Arg Leu Trp Lys Lys Ile Trp Ala Pro Val Pro Thr
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Pro Glu Ser Phe Phe Gln Pro Leu Tyr Arg Glu His Ser Gly Asn Phe

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                          280
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Lys Lys Trp Val Asn Thr Pro Phe Thr Ala Ser Ser Ile Glu Leu Val
                     295
                                          300
Pro Gln Ser Ser Thr Thr Thr Ser Ala Leu His Leu Ser Leu Tyr Pro
                  310
                                      315
Ala Lys Glu Lys Lys Phe Pro Gly Leu Pro Gly Leu Glu Glu Gln Leu
              325
                                  330
Glu Cys Asp Gly Met Ser Glu Pro Gly His Trp Cys Ile Ile Pro Leu
                             345
          340
Ala Ala Gly Gln Ala Val Ser Ala Tyr Ser Glu Glu Arg Asp Arg Pro
              360
                                             365
Tyr Gly Leu Val Ser Ile Asp Thr Val Thr Val Gly Asp Ala Glu Gly
                    375
                                         380
Leu Cys Val Trp Pro Cys Ser Cys Glu Asp Asp Gly Tyr Pro Ala Met
                  390
                                     395
Asn Leu Asp Ala Gly Arg Glu Ser Gly Pro Asn Ser Glu Asp Leu Leu
              405
                                 410
Leu Val Thr Asp Pro Ala Phe Leu Ser Cys Gly Cys Val Ser Gly Ser
                              425
Gly Leu Arg Leu Gly Gly Ser Pro Gly Ser Leu Leu Asp Arg Leu Arg
                          440
      435
                                             445
Leu Ser Phe Ala Lys Glu Gly Asp Trp Thr Ala Asp Pro Thr Trp Arg
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                                          460
Thr Gly Ser Pro Gly Gly Gly Ser Glu Ser Glu Ala Gly Ser Pro Pro
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                                      475
Gly Leu Asp Met Asp Thr Phe Asp Ser Gly Phe Ala Gly Ser Asp Cys
              485
                                  490
Gly Ser Pro Val Glu Thr Asp Glu Gly Pro Pro Arg Ser Tyr Leu Arg
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Gln Trp Val Val Arg Thr Pro Pro Pro Val Asp Ser Gly Ala Gln Ser
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Ser
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<210> 5 <211> 551 <212> PRT

<213> Homo sapiens

<400> 5

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 Ala
 Ala
 Leu
 Ser
 Trp
 Arg
 Leu
 Pro
 Leu
 Arg
 Arg</th

<212> PRT

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                                      155
Phe Glu Arg His Leu Glu Phe Glu Ala Arg Thr Leu Ser Pro Gly His
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               165
Thr Trp Glu Glu Ala Pro Leu Leu Thr Leu Lys Gln Lys Gln Glu Trp
                               185
           180
Ile Cys Leu Glu Thr Leu Thr Pro Asp Thr Gln Tyr Glu Phe Gln Val
                          200
Arg Val Lys Pro Leu Gln Gly Glu Phe Thr Thr Trp Ser Pro Trp Ser
                      215
                                          220
Gln Pro Leu Ala Phe Arg Thr Lys Pro Ala Ala Leu Gly Lys Asp Thr
                230
                                      235
Ile Pro Trp Leu Gly His Leu Leu Val Gly Leu Ser Gly Ala Phe Gly
              245
                                  250
Phe Ile Ile Leu Val Tyr Leu Leu Ile Asn Cys Arg Asn Thr Gly Pro
                            . 265
           260
Trp Leu Lys Lys Val Leu Lys Cys Asn Thr Pro Asp Pro Ser Lys Phe
                          280
Phe Ser Gln Leu Ser Ser Glu His Gly Gly Asp Val Gln Lys Trp Leu
                      295
Ser Ser Pro Phe Pro Ser Ser Ser Phe Ser Pro Gly Gly Leu Ala Pro
                310
                                      315
Glu Ile Ser Pro Leu Glu Val Leu Glu Arg Asp Lys Val Thr Gln Leu
                                  330
Leu Leu Gln Gln Asp Lys Val Pro Glu Pro Ala Ser Leu Ser Ser Asn
                               345
His Ser Leu Thr Ser Cys Phe Thr Asn Gln Gly Tyr Phe Phe Phe His
                          360
Leu Pro Asp Ala Leu Glu Ile Glu Ala Cys Gln Val Tyr Phe Thr Tyr
                      375
Asp Pro Tyr Ser Glu Glu Asp Pro Asp Glu Gly Val Ala Gly Ala Pro
                  390
                                      395
Thr Gly Ser Ser Pro Gln Pro Leu Gln Pro Leu Ser Gly Glu Asp Asp
               405
                                  410
Ala Tyr Cys Thr Phe Pro Ser Arg Asp Leu Leu Leu Phe Ser Pro
                               425
Ser Leu Leu Gly Gly Pro Ser Pro Pro Ser Thr Ala Pro Gly Gly Ser
                           440
Gly Ala Gly Glu Glu Arg Met Pro Pro Ser Leu Gln Glu Arg Val Pro
                       455
                                          460
Arg Asp Trp Asp Pro Gln Pro Leu Gly Pro Pro Thr Pro Gly Val Pro
                   470
                                       475
Asp Leu Val Asp Phe Gln Pro Pro Pro Glu Leu Val Leu Arg Glu Ala
                                   490
Gly Glu Glu Val Pro Asp Ala Gly Pro Arg Glu Gly Val Ser Phe Pro
                               505
Trp Ser Arg Pro Pro Gly Gln Gly Glu Phe Arg Ala Leu Asn Ala Arg
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Leu Pro Leu Asn Thr Asp Ala Tyr Leu Ser Leu Gln Glu Leu Gln Gly
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Gln Asp Pro Thr His Leu Val
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## <213> Mus musculus

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Phe Ser Pro Ser Leu Ser Thr Pro Asn Thr Ala Tyr Gly Gly Ser Arg
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Ala Pro Glu Glu Arg Ser Pro Leu Ser Leu His Glu Gly Leu Pro Ser
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                                         460
Leu Ala Ser Arg Asp Leu Met Gly Leu Gln Arg Pro Leu Glu Arg Met
                  470
                                     475
Pro Glu Gly Asp Gly Glu Gly Leu Ser Ala Asn Ser Ser Gly Glu Gln
              485
                       490
Ala Ser Val Pro Glu Gly Asn Leu His Gly Gln Asp Gln Asp Arg Gly
          500
                       505
Gln Gly Pro Ile Leu Thr Leu Asn Thr Asp Ala Tyr Leu Ser Leu Gln
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Glu Leu Gln Ala Gln Asp Ser Val His Leu Ile
                      535
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Met Gly Leu Gly Arg Cys Ile Trp Glu Gly Trp Thr Leu Glu Ser Glu

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<210> 7 <211> 522 <212> PRT

<213> Homo sapiens

<400> 7

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Leu Leu Phe Lys Leu Ser Pro Arg Val Lys Arg Ile Phe Tyr Gln Asn
                        295
Val Pro Ser Pro Ala Met Phe Phe Gln Pro Leu Tyr Ser Val His Asn
                   310
                                        315
Gly Asn Phe Gln Thr Trp Met Gly Ala His Arg Ala Gly Val Leu Leu
               325
                                   330
Ser Gln Asp Cys Ala Gly Thr Pro Gln Gly Ala Leu Glu Pro Cys Val
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                               345
Gln Glu Ala Thr Ala Leu Leu Thr Cys Gly Pro Ala Arg Pro Trp Lys
                           360
Ser Val Ala Leu Glu Glu Glu Glu Gly Pro Gly Thr Arg Leu Pro
                       375
                                           380
Gly Asn Leu Ser Ser Glu Asp Val Leu Pro Ala Gly Cys Thr Glu Trp
                  390
                                       395
Arg Val Gln Thr Leu Ala Tyr Leu Pro Gln Glu Asp Trp Ala Pro Thr
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                                   410
Ser Leu Thr Arg Pro Ala Pro Pro Asp Ser Glu Gly Ser Arg Ser Ser
           420
                               425
Ser Ser Ser Ser Ser Ser Asn Asn Asn Tyr Cys Ala Leu Gly
                          440
                                              445
Cys Tyr Gly Gly Trp His Leu Ser Ala Leu Pro Gly Asn Thr Gln Ser
                       455
                                          460
Ser Gly Pro Ile Pro Ala Leu Ala Cys Gly Leu Ser Cys Asp His Gln
                   470
                                      475
Gly Leu Glu Thr Gln Gln Gly Val Ala Trp Val Leu Ala Gly His Cys
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Gln Arg Pro Gly Leu His Glu Asp Leu Gln Gly Met Leu Leu Pro Ser
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Val Leu Ser Lys Ala Arg Ser Trp Thr Phe
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Ala Val Lys Gln Val Ser Trp Phe Leu Ile Tyr Ser Trp Val Cys Ser
                               25
Gly Val Cys Arg Gly Val Ser Val Pro Glu Gln Gly Gly Gly Gln
                          40
Lys Ala Gly Ala Phe Thr Cys Leu Ser Asn Ser Ile Tyr Arg Ile Asp
                       55
                                           60
Cys His Trp Ser Ala Pro Glu Leu Gly Gln Glu Ser Arg Ala Trp Leu
                   70
                                       75
Leu Phe Thr Ser Asn Gln Val Thr Glu Ile Lys His Lys Cys Thr Phe
                                  90
Trp Asp Ser Met Cys Thr Leu Val Leu Pro Lys Glu Glu Val Phe Leu
                              105
Pro Phe Asp Asn Phe Thr Ile Thr Leu His Arg Cys Ile Met Gly Gln
      115
                          120
Glu Gln Val Ser Leu Val Asp Ser Gln Tyr Leu Pro Arg Arg His Ile
                      135
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Lys Leu Asp Pro Pro Ser Asp Leu Gln Ser Asn Val Ser Ser Gly Arg

150

Cys Val Leu Thr Trp Gly Ile Asn Leu Ala Leu Glu Pro Leu Ile Thr 170 Ser Leu Ser Tyr Glu Leu Ala Phe Lys Arg Gln Glu Glu Ala Trp Glu 180 185 Ala Arg His Lys Asp Arg Ile Val Gly Val Thr Trp Leu Ile Leu Glu 200 Ala Val Glu Leu Asn Pro Gly Ser Ile Tyr Glu Ala Arg Leu Arg Val 215 220 Gln Met Thr Leu Glu Ser Tyr Glu Asp Lys Thr Glu Gly Glu Tyr Tyr 230 235 Lys Ser His Trp Ser Glu Trp Ser Gln Pro Val Ser Phe Pro Ser Pro 245 250 Gln Arg Arg Gln Gly Leu Leu Val Pro Arg Trp Gln Trp Ser Ala Ser 260 265 Ile Leu Val Val Pro Ile Phe Leu Leu Leu Thr Gly Phe Val His 280 Leu Leu Phe Lys Leu Ser Pro Arg Leu Lys Arg Ile Phe Tyr Gln Asn 295 300 Ile Pro Ser Pro Glu Ala Phe Phe His Pro Leu Tyr Ser Val Tyr His 310 315 Gly Asp Phe Gln Ser Trp Thr Gly Ala Arg Arg Ala Gly Pro Gln Ala 325 330 Arg Gln Asn Gly Val Ser Thr Ser Ser Ala Gly Ser Glu Ser Ser Ile 340 345 Trp Glu Ala Val Ala Thr Leu Thr Tyr Ser Pro Ala Cys Pro Val Gln 360 Phe Ala Cys Leu Lys Trp Glu Ala Thr Ala Pro Gly Phe Pro Gly Leu 375 380 Pro Gly Ser Glu His Val Leu Pro Ala Gly Cys Leu Glu Leu Gly Gly 390 395 Gln Pro Ser Ala Tyr Leu Pro Gln Glu Asp Trp Ala Pro Leu Gly Ser 410 Ala Arg Pro Pro Pro Pro Asp Ser Asp Ser Gly Ser Ser Asp Tyr Cys 425 Met Leu Asp Cys Cys Glu Glu Cys His Leu Ser Ala Phe Pro Gly His 440 Thr Glu Ser Pro Glu Leu Thr Leu Ala Gln Pro Val Ala Leu Pro Val 450 455 Ser Ser Arg Ala